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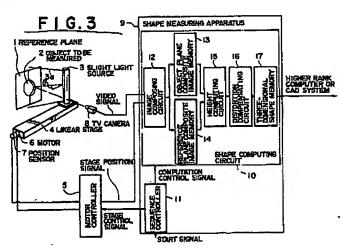
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Apparatus for measuring three-dimensional curved surface shapes.

A three-dimensional curved surface shape measuring apparatus of the slit light linear scanning type. In accordance with a composite image u(x, y) produced by image composing means when a slit light is scanned over a surface of an object to be measured, a measured value or computed value u₀(x, y) of a composite image with respect to a reference

plane, a light projecting angle θ to the reference plane and a reference plane-television camera distance a, a necessary computational processing is performed to determine a three-dimensional curved surface shape f(x, y) of the surface of the object which is free of any distortions due to a perspective effect of the television camera.



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| | of relevant passes | ation, where appropriate, | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int. CL5) | |
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| Y | WO-A-8607443 (THE BROKEN I COMPANY LIMITED) * page 6, line 31 - page 7 | HILL PROPRIETARY | 1, 3, 6 | GD1B11/24 | |
| , | PATENT ABSTRACTS OF JAPAN vol. 10, no. 52 (P-432)(2. & JP-A-60 196608 (TOMOHIKO 1985, * the whole document * | 109) 28 February 1982, | 1, 3, 6 | | |
| • | PATENT ABSTRACTS OF JAPAN vol. 10, no. 57 (P-434)(2: & JP-A-60 200141 (HITACHI October 1985, * the whole document * | 114) 07 March 1986, | 1, 6 | | |
| | DE-A-1423606 (UNITED STATE * page 3, line 20 - page 1 figures 1-7 * | • | 1, 6 | | |
| | | | | TECHNICAL FIELDS SEARCHED (Inc. Cl.5) | |
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